

The number of disturbances of extratropical origin was below the normal for September and over the eastern and middle sections of the steamer lanes gales were reported only on from two to three days.

The number of days with fog was not far from the normal over the Grand Banks, but somewhat in excess of normal along the American coast and over the eastern sections of the steamer lanes. Fog was reported on three days in the Straits of Gibraltar.

On the 1st and 2d St. Johns, Newfoundland, was near the center of a depression, although, judging from reports received, moderate weather prevailed over the entire ocean on both of these days. On the 3d this Low was central near 50° N., 35° W., and moderate westerly gales were reported from the southerly quadrants; it then moved rapidly northeastward, increasing in intensity, and on the 4th moderate to strong southwesterly gales swept over a limited area between the 55th and 60th parallels and the 15th and 20th meridians, while the station at Julianehaab, Greenland, reported a southwesterly wind, force 9, and a barometric reading of 29.22 inches.

On the 3d and 4th northeasterly gales prevailed over the region between Nantucket and the 60th meridian, accompanied by comparatively high barometric readings.

On the 6th there was a well-developed Low central near 45° N., 43° W., surrounded by a limited storm area, and also a depression over the Shetland Islands. On the 7th the western disturbance alone appeared on the map, being central near 45° N., 32° W.

On the 8th Belle Isle was near the center of a well-developed Low, although on that day, as well as the 9th, moderate weather prevailed over the entire ocean, with the exception of the tropical disturbance previously mentioned.

On the 10th the eastern section of the steamer lanes was covered by a depression that afterwards developed into an active disturbance of limited extent. On the 11th the center of this Low was near 55° N., 25° W., with moderate to strong southerly gales in the westerly quadrants.

Charts VIII to XV cover the period from the 15th to 22d, inclusive, when most unusual conditions prevailed, with three tropical disturbances on the map on one day, while during this period heavy weather was also reported by vessels in the steamer lanes and in the vicinity of the Azores.

On the 23d St. Johns, Newfoundland, was near the center of a Low that moved northeastward, and on the 24th was about 300 miles east of Belle Isle, with westerly gales near the center and moderate weather over the remainder of the ocean.

On the 26th a secondary Low was central near 50° N., 30° W., with northerly gales over a limited area in the westerly quadrants.

On the 29th and 30th moderate weather prevailed over the ocean generally, although on the latter date winds of force 7 were reported by vessels in the middle sections of the steamer lanes.

OCEAN GALES AND STORMS, SEPTEMBER, 1926

Vessel	Voyage		Position at time of lowest barometer		Gale began	Time of lowest barometer	Gale ended	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Highest force of wind and direction	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN													
Albert Ballin, Ger. S. S.	Southampton.	New York.	44 36N.	46 30W.	Sept. 2.	9p., Sep. 2.	Sept. 3.	Inches 29.73	SSE.	WSW., 9.	WNW.	SW., 9.	WSW.-NW.
Andania, Br. S. S.	New York.	Plymouth.	40 29N.	73 11W.	2	8p., 2.	4	29.92	NE	NE., 7.	NNE.	NE., 9.	Steady.
Rathlin Head, Br. S. S.	Middleborough.	Hampton Roads.	59 00N.	15 30W.	4	7a., 4.	6	28.75	S	SW., 10.	WSW.	—, 12.	—
Stornest, Br. S. S.	Newport News.	Santos.	17 10N.	50 45W.	4	5a., 5.	5	29.25	ENE	ESE., 12.	SE	ESE., 12.	ESE.-S.
La Crescenta, Br. S. S.	Liverpool.	Colon.	41 58N.	46 58W.	5	11p., 5.	6	29.56	NE	NE., 9.	N	NE., 10.	ENE.-N.
Idaho, Br. S. S.	Antwerp.	New York.	49 22N.	23 24W.	6	Noon, 7.	7	30.13	W	SW., 7.	WSW.	SW., 8.	SW.-WSW.
M. F. Elliott, Am. S. S.	Baytown.	Copenhagen.	54 40N.	28 00W.	9	4p., 10.	11	29.70	NNW	SW., 4.	NNW	NNW., 10.	SW.-NNW.
Dakarian, Br. S. S.	Liverpool.	Kingston.	26 42N.	63 48W.	10	8p., 10.	11	29.78	SE	SE., 9.	SE	SE., 9.	Steady.
La Crescenta, Br. S. S.	do.	Colon.	29 08N.	65 03W.	10	3a., 11.	12	29.69	ENE	SE., 10.	S	SSE., 11.	ENE.-ESE.
Coldbrook, Am. S. S.	Antwerp.	New Orleans.	30 47N.	54 00W.	11	7a., 12.	13	29.52	ESE	ESE., 12.	W	ESE., 12.	S.-E.-S.-W.
Amsterdam, Du. S. S.	Rotterdam.	Baton Rouge.	30 30N.	70 06W.	12	—, 13.	14	29.49	E	NNE., 10.	NW	NNE., 10.	SE.-NNE.-NW.
Mayaro, Br. S. S.	New York.	Grenada.	31 49N.	69 11W.	13	—, 14.	15	28.78	NE	S., 11.	SW	NE., 12.	E.-S.-SW.
Matura, Br. S. S.	Dominica.	New York.	19 50N.	63 55W.	14	6a., 15.	15	28.82	NW	SW., —.	SSE	S., 12.	NW.-W.-SW.-SSE.
Youngstown, Am. S. S.	English Channel.	Galveston.	33 45N.	67 00W.	15	10p., 15.	16	29.29	E	ESE., 7.	NW	NNE., 12.	E.-NE.
Hilversum, Du. S.	Rotterdam.	Montreal.	53 57N.	33 45W.	15	Noon, 15.	16	29.32	SW	WNW., 8.	N	—, 9.	—
Gedania, Danz. S. S.	Canal Zone.	Charleston.	19 30N.	75 00W.	16	6p., 16.	17	29.54	SW	NNW., 5.	SSE	W., 10.	E.-ESE.
Fort St. George, Br. S. S.	New York.	Bermuda.	36 35N.	69 08W.	16	5p., 16.	17	29.05	NE	SSW., 12.	WNW	—, 12.	S.-SW.
Lumina, Br. S. S.	Rotterdam.	New Orleans.	27 40N.	74 45W.	17	4p., 17.	18	29.82	SE	SSE., 9.	ESE	—, 9.	Steady.
Nobles, Am. S. S.	Mediterranean.	New York.	35 15N.	63 38W.	17	5p., 17.	18	29.75	S	WSW., —.	W	WSW., 9.	WSW.-W.
Bird City, Am. S. S.	Copenhagen.	Baltimore.	40 40N.	61 51W.	16	6p., 17.	19	29.37	SE	ESE., —.	N	—, 12.	SE.-SW.-NE.
Middleham Castle, Br. S. S.	Galveston.	Havre.	47 02N.	21 36W.	17	Noon, 17.	18	29.30	SSW	SSW., 8.	S	S., 9.	NE.-E.-SSW.
Michigan, Fr. S. S.	Havre.	Galveston.	24 35N.	81 28W.	18	5a., 18.	21	29.18	N	N., 10.	S	W., 10.	E.-ESE.
El Oceano, Am. S. S.	New York.	do.	27 15N.	79 40W.	18	Noon, 18.	18	29.62	ENE	E., 8.	SE	ENE., 10.	E.-ESE.
Concho, Am. S. S.	do.	do.	29 20N.	80 30W.	17	4a., 18.	19	29.76	E	E., 8.	E	E., 12.	Steady.
Scalania, Br. S. S.	New Orleans.	Hull.	37 32N.	60 02W.	18	Mdt., 18.	20	29.30	W	SW., 9.	SSE	SW., 11.	W.-SW.
Albert Ballin, Ger. S. S.	New York.	Cherbourg.	41 00N.	61 40W.	17	Noon, 18.	19	29.18	ENE	NNE., 12.	SSE	NNE., 12.	N.-NNE.
Martha Washington, Ital. S. S.	Lisbon.	New York.	41 00N.	63 10W.	17	1p., 18.	19	29.70	SE	ENE., 10.	NE	ESE., 10.	ESE.-E.
Housatonic, Br. S. S.	London.	Philadelphia.	45 38N.	42 03W.	17	2p., 18.	19	28.85	NNW	NNW., 8.	NNW	NNW., 9.	Steady.
Sollitaire, Am. S. S.	Port Arthur.	Tampa.	26 32N.	87 15W.	19	10a., 19.	19	29.53	WNW	WNW., 9.	WNW	WNW., 9.	NW.-W.
Berlin, Ger. S. S.	New York.	Cherbourg.	40 50N.	64 10W.	19	Noon, 19.	19	29.77	N	NE., 9.	E	NNE., 10.	NNE.
Cogne, Ital. S. S.	Antwerp.	Hamp ton Roads.	36 46N.	32 43W.	19	4a., 19.	19	29.96	W	WNW., 8.	NW	WNW., 9.	—
De La Salle, Fr. S. S.	Houston.	Havre.	38 28N.	64 14W.	19	4a., 20.	21	29.59	N	NNE., 9.	SE	NNE., 9.	NE.-E.
Silverpine, Br. S. S.	Singapore.	New York.	36 33N.	36 33W.	19	Noon, 20.	21	29.65	NW	WNW., 9.	—	WNW., 9.	WNW.-W.
Flandre, Fr. S. S.	Bordeaux.	Cristobal.	40 35N.	17 10W.	20	2p., 20.	21	29.53	SE	SE., 8.	WNW	SSE., 9.	SE.-SW.
Housatonic, Br. S. S.	London.	Philadelphia.	42 14N.	57 20W.	21	11p., 21.	22	29.22	E	N., 12.	NNW	N., 12.	ENE.-N.
Maine, Dan. S. S.	Copenhagen.	Boston.	59 30N.	12 10W.	20	4a., 21.	21	29.92	S	W., 8.	WNW	W., 9.	SSW.-W.-WNW.

Ocean gales and storms, September, 1926—Continued

Vessel	Voyage		Position at time of lowest barometer		Gale began	Time of lowest barometer	Gale ended	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Highest force of wind and direction	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN—Continued													
Della Terzo, Ital. S. S.	Dakar	Norfolk	29 40N.	46 03W.	21	3p., 22	23	<i>Inches</i> 28.50	S	S., 10		N., 12	S.-N.
Norwegian, Br. S. S.	Havre	do	41 46N.	56 00W.	21	1a., 22	22	28.81	SE	Calm	NW	N., 12	SE.-NW.
Hardenberg, Du. S. S.	Rotterdam	Montreal	53 32N.	45 39W.	23	7, 24	25	29.37	SE	S., 8	SW	S., 8	SE.-S.
Natica, Br. S. S.	Blexen	Curacao	36 17N.	35 25W.	25	6a., 25	25	29.10	E	NNE., 12	N	NNE., 12	
Baron Sempill, Br. S. S.	London	New York	49 20N.	32 00W.	26	4a., 26	26	29.83	N	N., 9	NE	N., 10	
Conte Rosso, Ital. S. S.	New York	Naples	38 23N.	28 00W.	25	5p., 26	26	29.41	NNE	NNE., 9	SW	NNE., 9	
Sinaia, Fr. S. S.	Lisbon	Providence	38 25N.	30 25W.	26	7p., 27	28	28.94	E	NNW., 10	NNE	N., 10	E.-N.-NW.-N.-NNE.
Clontarf, Am. S. S.	New York	Morocco	40 33N.	34 13W.	28	4p., 28	29	29.75	NNE	NNE., 8	NE	NNE., 9	NNE.-N.
NORTH PACIFIC OCEAN													
Steel Ranger, Am. S. S.	Yokohama	Vancouver	49 00N.	175 50W.	Aug. 30	2a., 31st	Sep. 1	29.36	E	N., 9	N	N., 9	NE.-N.
Anomia, Br. S. S.	San Pedro	Yokohama	35 00N.	157 00E.	Sept. 1	2a., 2	2	28.65	SSE	SSW., 12	WNW	SSW., 12	
Indian Arrow, Am. S. S.	San Francisco	Shanghai	32 50N.	157 50E.	1	11p., 1	2	29.79	S	W	W	SW., 9	S.-SW.-W.
Maunawili, Am. S. S.	Honolulu	San Francisco	36 20N.	127 00W.	1	4p., 3	3	29.74	NNE	NNW., 5	NNW	N., 8	N.-NNW.
West Henshaw, Am. S. S.	Stain, P. I.	do	38 20N.	170 30E.	2	8p., 2	2	29.68	S	ESE., 8	SE	ESE., 8	S.-E.
Tahchee, Br. S. S.	Tsurumi	do	43 40N.	179 37E.	2	Noon, 3	3	29.75	SSE	SSE., 8	S	SSE., 8	Steady.
Harold Dollar, Br. S. S.	Columbia River	Yokohama	44 25N.	159 20E.	2	4p., 2	3	29.32	NW	NW., 5	NW	NW., 11	Steady.
Do.	do	do	39 39N.	149 00E.	4	4a., 4	5	29.46	S	S., 6	NW	NW., 11	S.-W.-NW.
Africa Maru, Jap. S. S.	Yokohama	Victoria	49 11N.	175 07W.	2	10p., 2	4	29.50	S	S., 9	S	S., 9	Steady.
City of Vancouver, Br. S. S.	Grays Harbor	Yokohama	50 01N.	170 28E.	3	Noon, 3	4	28.33	ESE	NE., 10	NW	NE., 10	
Juyo Maru, Jap. S. S.	Everett	do	50 22N.	179 44W.	2	10p., 3	5	29.00	S	S.	N	S., 10	9 points.
Mefyo Maru, Jap. S. S.	Muroran	Seattle	43 21N.	156 15E.	6	2a., 6	7	29.17	NW	NW., 6	NNW	NNW., 8	
Juyo Maru, Jap. S. S.	Everett	Yokohama	43 22N.	151 50E.	10	3a., 11	11	29.82	SSE	ESE., 4	NE	E., 11	2 points.
Proteslaus, Br. S. S.	Yokohama	Victoria	42 45N.	155 47E.	11	4p., 11	12	29.48	E	ENE., 10	NE	E., 10	E.-ENE.
Akibasan Maru, Jap. S. S.	do	San Francisco	47 48N.	175 15W.	12	8a., 13	15	29.91	SE	SE., 5	SSE	SSE., 8	Steady.
Koyu Maru, Jap. S. S.	Grays Harbor	Yokohama	50 10N.	172 30E.	12	1a., 15	16	29.21	SE	NNE., 7	W	NW., 9	SE.-E.-NNE.
Kurohime Maru, Jap. S. S.	Yezo	Farallon Isl.	48 50N.	174 43E.	13	5p., 14	15	29.06	ESE	E., 3	SSE	NE., 9	E.-SE.
Claudeus, Am. S. S.	Balboa	San Diego	17 11N.	101 40W.	14	4p., 14	14	29.74	NW	ENE., 4	SSE	NW., 9	Variable.
Pres. Jefferson, Am. S. S.	Yokohama	Seattle	48 00N.	174 00E.	14	4a., 15	15	28.91	NNW	ENE., 4	SSE	NNW., 9	10 points.
Pres. Monroe, Am. S. S.	New York	San Francisco	18 05N.	103 40W.	15	1a., 16	16	29.72	NW	W., 8	SW	W., 8	
Steel Navigator, Am. S. S.	Balboa	Honolulu	15 59N.	109 35W.	16	2p., 16	16	29.04	SW	WSW., 8	WNW	WSW., 9	WSW.-W.
West Kader, Am. S. S.	Yokohama	Portland	39 52N.	148 50E.	17	2p., 18	18	29.53	NE	E., 7	E	E., 8	E.-NE.
West Chopaka, Am. S. S.	Stain, P. I.	San Francisco	42 51N.	172 04E.	23	Noon, 23	24	29.70	NW	W., 4	NW	NW., 8	Steady.
Benalder, Br. S. S.	Astoria	Panama	21 07N.	108 47W.	24	8p., 24	25	29.68	E	E., 7	SE	SE., 10	E.-ESE.
Havre Maru, Jap. S. S.	Muroran	Coos Bay	40 20N.	161 00E.	25	7a., 26	26	29.57	S	S., 10	S	S., 9	Steady.
El Oso, Br. S. S.	San Pedro	Yokohama	34 00N.	176 44E.	25	Midt., 25	26	29.55	S	WSW., 5	N	N., 9	SW.-NW.
Toco, Br. S. S.	Antofagasta	San Pedro	24 40N.	112 43W.	26	—, 26	28	29.56	SSE	S., 8	SW	S., 8	
West Kader, Am. S. S.	Yokohama	Portland	49 50N.	143 45W.	28	8p., 28	28	29.49	SE	SSW., 7	SSW	SE., 9	
Pres. Grant, Am. S. S.	do	Seattle	50 01N.	157 59W.	27	—, 28	28	29.34	SE	SSW., 6	SSE	SE., 9	6 points.
Ryujin Maru, Jap. S. S.	Otaru	Portland	52 30N.	154 00W.	28	1p., 28	29	29.22	SE	SW., 7	W	ESE., 10	SE.-WSW.
Oridono Maru, Jap. S. S.	Karatsu	Astoria	49 51N.	162 48W.	27	Noon, 28	30	29.28	SE	W., 6	W	W., 8	
Kureha Maru, Jap. S. S.	Milke	do	50 13N.	148 30W.	27	3a., 30	30	29.23	SE	WSW., 7	WNW	SE., 8	WSW.-WNW
Paris Maru, Jap. S. S.	Yokohama	Seattle	50 02N.	158 15W.	29	8p., 29	30	29.28	SSE	W., 8	W	W., 8	
INDIAN OCEAN													
Weirbank, Br. S. S.	Penang	Suez	13 32N.	53 18E.	Sept. 7	1p., 8	Sep. 8	29.78	SW	S., 6	S	SSW., 8	SSW.-S.
SOUTH PACIFIC OCEAN													
West Nilus, Am. S. S.	San Francisco	Buenos Aires	43 06S.	82 44W.	Sept. 9	6p., 10	Sep. 10	29.43	S	S., 7	SSE	S., 8	N.-NW.
Makura, Br. S. S.	Wellington	Rarotonga	35 32S.	176 11W.	14	9a., 15	15	29.33	NW	N., 7	W	N., 11	N.-NW.
Tamaha, Br. S. S.	Port San Luis	Wellington	39 00S.	178 45E.	16	4p., 16	18	29.18	NW	WNW., 8	W	SW., 9	WNW.-SSW.-W.

551.506 (265.2)
NORTH PACIFIC OCEAN

By WILLIS E. HURD

The approach of autumn was well illustrated by the pressure averages on the weather map of the North Pacific for September. West of the peninsula of Alaska the Aleutian Low was now well established, although shallower than the normal. The greatest abnormality in this region was at Kodiak, where the pressure was 30.01 inches, while the average is only 29.70, or the same as that at St. Paul. Several cyclones, or oscillations of the same low, were blocked in upper latitudes in their forward movements by a persistent high over the Gulf of Alaska between the 3d and the 26th, for it was not until the latter date that a low succeeded in reaching as far east as Juneau. The way now being clear, another cyclone from the western Aleutians came rapidly through, so that at the close of the month a great depression overlay most of the ocean north of the 40th parallel.

The North Pacific high covered its usual position throughout the month and, in general, for most of Sep-

tember extended from the headwaters of the Gulf of Alaska southward and southwestward to Midway Island.

The following table shows the barometric conditions at selected stations:

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level at indicated hours, North Pacific Ocean, September, 1926

Station	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	Inches	Inch	Inches		Inches	
Dutch Harbor 1,4	29.81	+0.05	30.36	13th	29.06	20th
St. Paul 1,5	29.83	+0.13	30.44	12th	29.26	30th
Kodiak 1	30.01	+0.31	30.28	5th	29.28	30th
Midway Island 1,5	30.00	-0.07	30.04	2d	29.84	14th
Honolulu 2	29.98	-0.02	30.08	1st	29.86	18th
Juneau 2	30.07	+0.15	30.47	24th	29.46	30th
Tatoosh Island 1,3	29.96	-0.03	30.50	24th	29.52	15th
San Francisco 1,3	29.91	-0.03	30.07	20th	29.74	1st
San Diego 2,3	29.86	-0.02	30.00	12th	29.75	23d.

1 P. m. observations only.

2 A. m. and p. m. observations.

3 Corrected to 24-hour mean.

4 One day missing.

5 Two days missing.

6 And other dates.